

EX

Notice of Allowability	Application No.	Applicant(s)	
	10/799,836	SAINI ET AL.	
	Examiner	Art Unit	
	Johnnie L. Smith II	2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed 03/12/2004.
2. ☒ The allowed claim(s) is/are 1-29 and 32-42.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 0509.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>0509</u> . |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>1229,0408</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-29 and 32-42, drawn to a microcolumn, classified in class 250, subclass 398.
- II. Claims 30 and 31, drawn to a support clamp, classified in class 24, subclass 455.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as combination and subcombination.

Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because group I does not require that clamp of group II. The subcombination has separate utility such as it can be used in a different embodiment.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Dave Hofman on 05/10/2005.

The application has been amended as follows:

Claims 30 and 31 are canceled.

Specification

4. The disclosure is objected to because of the following informalities: in section titled "cross reference", the application being referred to requires updating. Appropriate correction is required.

Drawings

5. The drawings filed on 03/12/2004 are acceptable subject to correction of the informalities indicated. Figures 1, 4, 6, 7, and 9 are too dark. In order to avoid abandonment of this application, correction is required in reply to the Office action. The correction will not be held in abeyance.

Allowable Subject Matter

6. Claims 1-29 and 32-42 are allowed.

7. The following is an examiner's statement of reasons for allowance: the prior art searched and cited failed to teach or fairly suggest a microcolumn, having an assembly substrate including a plurality of sockets; and a plurality of beam modification components each having a connector coupled to a corresponding one of the plurality of sockets as disclosed in claim 1. Claims 2-29 are allowable because of their dependencies upon claim 1. In reference to claim 32, the prior art searched and cited failed to teach or fairly suggest a method of manufacturing a microcolumn, having the step of providing a substrate having a device layer formed over an insulating layer, an assembly substrate having a plurality of sockets, and a plurality of beam modification components each having a connector

in combination with the remaining elements of the claim. Claims 33-35 are allowable because of their dependencies upon claim 32. In reference to claim 36, the prior art searched and cited failed to teach or fairly suggest a microcolumn system having a microcolumn substantially aligned with an electron gun for modifying an electron beam produced by the electron gun, the microcolumn including: an assembly substrate including a plurality of sockets; and a plurality of beam modification components each having a connector coupled to a corresponding one of the plurality of sockets in combination with the remaining elements of the claim. Claims 37-42 are allowable because of their dependencies upon claim 36. As discussed above the prior art failed to teach that claimed limitations of having an assembly with a plurality of sockets and beam modification components corresponding to the said sockets.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,762,116 (Skidmore), US 6,396,711 (Degani et al), 6,672,795 (Ellis et al), US 6,561,725 (Ellis et al), 6,398,280 (Parker et al), and US 6,881,074 (McLenaghan). All of the cited US patents contain art similar to that being claimed by applicant, more specifically, electric circuit assemblies having micro-sockets.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnnie L. Smith II whose telephone number is 571-272-2481. The examiner can normally be reached on Monday-Thursday 7-4 P.M. and Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on 571-272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JLSII

Johnnie L Smith II
Examiner
Art Unit 2881


NIKITA WELLS
PRIMARY EXAMINER

05/12/05